

Notice of Allowability	Application No.	Applicant(s)	
	10/701,215	XIAO ET AL.	
	Examiner	Art Unit	
	Diane E. Jones	2862	

– The MAILING DATE of this communication appears on the cover sheet with the correspondence address–

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to communications filed 10/6/05.
2. ☒ The allowed claim(s) is/are 6-14, 16, 17, 19-28 and 30-38.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |



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10-701, 215

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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20051012

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

Responsive to communications filed 8/28/2005

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert M. Tuttle, attorney of record, on 10/13/05 with respect to proposed amendments submitted by the attorney and filed on 10/06/05 and an agreement which was reached respecting changes to the aforementioned proposed amendments.

The application has been amended as follows:

In the claims:

Claims 15, 18 and 29 are cancelled.

Claim 6, in line 4, after the phrase "a bucking device disposed on the logging tool;" insert the phrase "--a current controlling device that provides a current to the bucking device--" .

In Claim 6, lines 5-6, delete the phrase "wherein the bucking device adaptively cancels a signal induced in at least one of the transmitter or the plurality of receivers"

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and insert the phrase “—wherein the current provided to the bucking device is varied based on which receiver is being used—”.

Claim 16, line 6, after the phrase “coupled from the transmitter;” delete the word “and” and insert the phrase “—providing a current with a current controlling device to a bucking device—”.

Claim 16, line 7, delete “a” (second recitation) and insert the word “—the—”.

Claim 16, line 9, after the word “signal” insert the phrase “varying the current in the bucking device to accommodate a plurality of receivers.—”.

Claim 21, line 5, after the word “coil;” insert the phrase “--a current controlling device that provides a current to the bucking coil;--” .

Claim 21, line 8, after the word “and”, delete the phrase “wherein the bucking coil minimizes the magnitude of the signals that are directly coupled from the transmitting coil to the receiving coil.” and insert the phrase “--wherein the current provided to the bucking coil is varied based on whether the first or second receiver is being used.—”.

Claim 26, line 1, delete the number “23” and insert the number “—25--”

Claim 28, line 8, delete the word “and”.

Claim 28, line 9, after the word "coil," insert the phrase "—and wherein the current provided to the bucking coil is varied based on which receiver coil the current controlling device is coupled to.—".

Claim 33, line 3, after the phrase " $i = 1, 2, \dots, N$ " insert the phrase "—where $1/N$ is greater than zero—".

Claim 34, at the end, insert the phrase "—where $1/N$ is greater than zero and wherein $I_T(f_i)$ is the current in the transmitting coil due to the i -th receiving coil at frequency f_i and $I_B(f_i)$ is the current in the bucking coil due to the i -th receiving coil at frequency f_i .—".

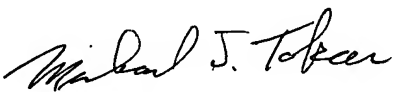
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane E. Jones. The examiner can normally be reached on M-F.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. E. Jones


Michael Tokar
Supervisory Patent Examiner
Technology Center 2800